

# Alexa R. Tartaglino

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EDUCATION	<b>New York University</b> , New York, NY B.A. with Honors in Computer Science B.A. in Mathematics GPA: 3.938 / 4.0; <i>summa cum laude</i>	Sept. 2018 – May 2023
RESEARCH EXPERIENCE	<b>Brown University, LUNAR Lab</b> Research Scientist <i>Mentor</i> : Ellie Pavlick <i>Project</i> : Identifying abstract concepts in Vision Transformers	2023 –
	<b>New York University, Human &amp; Machine Learning Lab</b> Research Scientist (2023 –), Undergraduate Researcher (2019 – 2023) <i>Mentors</i> : Brenden M. Lake, Wai Keen Vong <i>Honors Thesis</i> : “Human-Machine Perceptual Divergence: Two Investigations on How Neural Networks See the World.” <i>Projects</i> : • Probing shape versus texture bias in deep neural networks • Modeling human visual category learning with CNNs	2019 –
	<b>NIH, Training Program in Computational Neuroscience</b> <i>Mentor</i> : Wei Ji Ma <i>Presentations</i> : • “Modeling artificial category learning from pixels.” <i>The NIH Joint Symposium in Computational Neuroscience</i> , 2021. • “Analogues of mental simulation and imagination in deep learning.” Invited Presentation at the NYU Center for Neural Science Swartz Journal Club, 2021.	2020 – 2021
PUBLICATIONS	[1] <a href="#">Deep neural networks can learn generalizable same-different relations.</a> <b>Alexa R. Tartaglino</b> , Sheridan Feucht, Michael A. Lepori, Wai Keen Vong, Charles Lovering, Brenden M. Lake, and Ellie Pavlick. <i>Under review @ ML conference</i> , 2023. <b>arXiv preprint.</b>	
	[2] <a href="#">A developmentally-inspired examination of shape versus texture bias in machines.</a> <b>Alexa R. Tartaglino</b> , Wai Keen Vong, and Brenden M. Lake. <i>Proceedings of the Annual Meeting of the Cognitive Science Society 44</i> , 2022. <b>Oral presentation.</b>	
	[3] <a href="#">Modeling artificial category learning from pixels: Revisiting Shepard, Hovland, and Jenkins (1961) with deep neural networks.</a> <b>Alexa R. Tartaglino</b> , Wai Keen Vong, and Brenden M. Lake. <i>Proceedings of the Annual Meeting of the Cognitive Science Society 43</i> , 2021. <b>Poster presentation.</b>	
SELECTED HONORS	2023 <b>Robert J. Glushko Prize for Outstanding Undergraduate Honors Thesis in Minds, Brains, and Machines</b> , awarded by the NYU Minds, Brains, and Machines initiative.	
	2023 <b>Mathematics Award for Academic Achievement</b> , awarded to four graduating seniors by the NYU Courant Institute.	

- 2023    **Computer Science Prize for Academic Excellence in the Honors Program**, awarded to one graduating senior by the NYU Courant Institute.
- 2023    **Phi Beta Kappa**
- 2022    **Barry M. Goldwater Scholarship**
- 2021    **Computer Science Prize for the Most Promising Student in the Junior Year**, awarded to one junior by the NYU Courant Institute.
- 2020    **NIH grant**, “Blueprint Training in Computational Neuroscience: From Biology to Model and Back Again.” (R90DA043849)
- 2019    **NYU Presidential Honors Scholars**
- 2016    **Rensselaer Medal Scholarship**, awarded for excellence in STEM.

SKILLS

- **Programming & script languages:** Python, Java, C++, C#, R, MATLAB, HTML, JavaScript, bash, LaTeX
- **Python packages:** PyTorch, JAX, autograd, einsum/einops, NumPy, pandas, PIL/cv2, Matplotlib/seaborn
- **Tools:** Unity, Blender, Weights & Biases, Jupyter Notebook/Google Colab, Git, Photoshop

SERVICE &  
ACTIVITIES

- AI For Good**, volunteer. 2021 – 2022
- NYU Women in Computing (WinC)**, member. 2018 – 2023
- New York Cares**, volunteer. 2018 – 2022
- Girl Scouts of America**, member. Silver Award recipient in 2014. 2012 – 2015